



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/217,542	12/21/1998	JAMES MORRISON	8055	8206

26884 7590 12/02/2005
PAUL W. MARTIN
NCR CORPORATION, LAW DEPT.
1700 S. PATTERSON BLVD.
DAYTON, OH 45479-0001

EXAMINER

LASTRA, DANIEL

ART UNIT	PAPER NUMBER
----------	--------------

3622

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/217,542

Applicant(s)

MORRISON, JAMES

Examiner

DANIEL LASTRA

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3622

1. Claims 27-38 have been examined. Application 09/217,542 (Method and apparatus for determining if a user walks away from a self-service checkout terminal during operation thereof) has a filing date 12/21/1998.

Response to Amendment

2. In response to Non Final Rejection filed 06/06/2005, the Applicant filed an Amendment on 09/06/2005, which cancel claims 1-26 and added new claims 27-38.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addy (US 6,056,087) in view of Terranova (US 6,098,879) and further in view of Cotton (US 4,630,110).

As per claims 27 and 33, Addy teaches:

A method of operating a self-service checkout terminal of a retail store, comprising the steps of:

recording a number of merchandise items for purchase by a user by said self-service checkout terminal (see Addy column 1, lines 30-41). Addy teaches a system with a processing unit that monitors output signals generated by a scanner, a video system and a light curtain device in order to supervise and provide security monitoring of a given checkout procedure. In addition, if the light curtain device detects that the

Art Unit: 3622

customer placed an item in the post-scan area but the video system did not detect motion associated with the customer attempting to scan the item, and the scanner did not read a product identification code associated with the item, it can be inferred with a high degree of confidence that the customer was intentionally operating the self-service checkout terminal improperly. Since the customer appears to have made no attempt to scan the item prior to placing the item in the post-scan area, an entry is made in a log. A security officer may be paged to audit or otherwise investigate the customer's transaction if the log entry exceeds a threshold value (see Addy column 8, lines 10-45).;

Addy fails to teach:

receiving movement signals from a plurality of adjoining detection zones of a floor mat in a checkout floor area adjacent to said self-service checkout terminal in response to said detection zones reacting to a weight of said user as said user walks on said detection zones by said self-service checkout terminal;

tracking directional movements of said user from said movement signals by said self-service checkout terminal as said user walks about said checkout floor area in any direction while using said self-service checkout terminal; receiving a last movement signal as said user leaves said checkout floor area indicative of said user ceasing operation of said self-checkout terminal;

determining if a payment-tendered control signal was received by said self-service checkout terminal indicative of said user having tendered payment for said merchandise items prior to receipt of said last movement signal; and

Art Unit: 3622

if said payment-tendered control signal was not received by said self-service checkout terminal, determining a last direction of movement of said user prior to said user leaving said checkout floor area by said self-service checkout terminal, and operating a summoning device so as to summon retail personnel by said self-service checkout terminal if said last direction of movement was towards an exit of said store. However, Terranova teaches a system that detects the movement of a customer using a self-service checkout terminal (see Terranova column 11, lines 1-21; column 1, lines 34-40) and alerts security personnel when it detects that said customer is attempting to walk-away from a checkout terminal before generation of a payment-tendered control signal (see Terranova column 34, lines 17-41). Cotton teaches of a floor sensitive mat that senses the direction a person is walking across the mat (see column 10, lines 45-61). The floor sensitive mat can determine if the person is walking out of the store or if the person is entering the store. From this information, the system triggers a signal to turn on surveillance equipment in a point of sale environment (see column 27, lines 35-67 – column 28, lines 1-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy et al system would summoned security personnel, when it detects that a customer walks pass a certain boundary in a checkout terminal using a movement detection floor mat, as taught by Cotton which would indicate that said customer is walking away from said checkout terminal before generation of a payment-tendered control signal, as taught by Terranova. This feature would prevent a customer using a self-service checkout terminal to leave the store without paying for the merchandise.

Art Unit: 3622

As per claims 28 and 34, Addy teaches:

The method of claim 1, but does not expressly teach wherein said summoning device comprises a status light above said self-service checkout terminal. However, Official Notice is taken that it is old and well known in the retail business to have flashing lights (i.e. flash red lights) in a store to indicate an emergency or urgent situation. It would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Addy's self-service checkout terminal would include flashing lights that when activated would summon personnel to investigate the reason of said activation.

As per claims 29 and 35, Addy teaches:

The method of claim 1, wherein said summoning device comprises a paging system coupled to said self-service checkout terminal (see column 8, lines 40-45).

As per claims 30 and 36, Addy teaches:

The method of claim 1, but fails to teach further comprising tracking rates of directional movements and operating said summoning device after determining from a final rate that said user is exiting said checkout floor area in haste. However, Cotton teaches a floor sensitive mat that senses the direction a person is walking across said mat (see Cotton column 10, lines 45-61) and counts the number of times a state in said mat changes in response to a person walking across said mat (see Cotton column 27, line 50 – column 28, line 19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Addy would summoned security personnel, when it detects that a customer is exiting a checkout

Art Unit: 3622

area based upon how fast said state changes in response to a person walking across said mat, as taught by Cotton. Addy would be motivated to determine if a person is leaving a store in a haste in order to summon personnel to investigate the reason of said haste.

As per claims 31 and 37, Addy teaches:

The method of claim 1, but fails to teach further comprising:

determining that said last direction of movement of said user prior to said user leaving said checkout floor area was towards a shopping area by said self-service checkout terminal; receiving a new movement signal as said user reenters said checkout floor area; and allowing said user to continue a retail transaction in response to receipt of said new movement signal. However, Terranova teaches a system that detects if a customer returns to a checkout area and allows the customer to continue a retail transaction in response to said detecting (see Terranova column 34, lines 16-42). Cotton teaches a floor sensitive mat that senses the direction of a person walking across the mat (see Cotton column 10, lines 45-61). The floor sensitive mat can determine if the person is walking out of the store or if the person is entering the store. From this information, the system triggers a signal to turn on surveillance equipment in a point of sale environment (see Cotton column 27, lines 35-67; column 28, lines 1-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy system would determine if the user is returning to the shopping area and is not leaving the store using the Cotton's movement

detection floor mat, and would trigger or disable a signal accordingly, as taught by Terranova.

As per claims 32 and 38, Addy teaches:

The method of claim 1, further comprising: but fails to teach tracking directional movements of a cart of said user on said floor mat. However, Cotton teaches detecting the movement of a hand truck across a floor sensitive mat (see Cotton column 29, lines 1-10). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that the Addy system would determine the movement of a hand shopping cart and would use said movement to determine if personnel should be summoned, as taught by Terranova.

Response to Arguments

4. Applicant's arguments filed 09/06/2005 have been fully considered but they are not persuasive. Applicant argues that Terranova teaches transponders for determining customer location and movement information at various locations around a convenience store-filling station but does not teach determination of customer location and movement information from adjoining detection zones of a floor mat adjacent a self-service checkout terminal. The Examiner answers that Cotton teaches a floor sensitive mat that is used to detect the direction of a customer in a store. From Applicant's specification page 11, lines 1-15 "adjoining detection zones of a floor mat" is interpreted as a floor mat that detects the direction on which a person is traveling on said mat, similar to Cotton (see Cotton column 10, lines 45-60).

Applicant argues that Cotton teaches a series of disjoint floor mats, which determine two directions, in or out of the store but Applicant's claims recite determinations of customer movement in any direction about adjoining detection zones in the floor area. The Examiner answers that Applicant's floor mat as defined by Applicant's specification (see page 15, lines 4-8) also teaches two directions, in or out of the checkout area where the floor mat is located. Nowhere, in the Applicant's specification is mentioned the term "any direction" as claimed by the Applicant. However, the Examiner did not make a Section 112 rejection because the term "any direction" is a broad term that is interpreted as "determining the direction in which a person is walking".

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3622

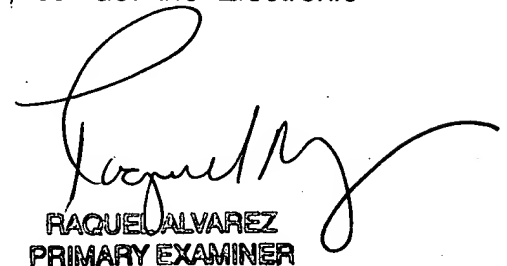
Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W. STAMBER can be reached on 571-272-6724. The Examiner's Right fax number is 571-273-6720.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

Daniel Lastra
November 17, 2005


RAQUEL ALVAREZ
PRIMARY EXAMINER